

cancelled. Claims 1, 9, 18 and 20 have been amended.

The Examiner has rejected Claims 1 - 4 and 6 - 9 and 18 - 20 under 35 U.S.C. §102(b) as being anticipated by Anderson et al.

The Applicant has amended Claims 1 and 18 to call for (underlining added for emphasis) ... a pair of alignment members connected to the spacers such that the spacers and alignment members form an integral spacer body, to align the spacers at the non-display area in a constant manner; and ... a pair of subsidiary alignment members, wherein the subsidiary alignment members are attached substantially perpendicular to the alignment members to form a substantially rectangular spacer holding state reinforcement frame enclosing the spacers.

The present invention provides for alignment members connected to the spacers to form an integral spacer body. The integral spacer body then has subsidiary alignment members attached substantially perpendicular to the alignment members to form a spacer holding state reinforcement frame which is substantially rectangular and encloses the spacers.

Anderson, on the other hand, and especially Fig. 19 as pointed to by the Examiner, merely provides for the spacers being connected in a rectangular manner. Anderson does not provide for alignment members attached to subsidiary alignment members connected to provide for the formation of a spacer holding state reinforcement frame which is substantially rectangular and encloses the spacers.

Further, Claim 1 calls for ... wherein each of the plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell ...

As such, the present invention also provided for a plurality of exhaust grooves situated in each spacer to enable fluid gas flow with the cell.

However, Anderson, and especially Fig. 9 as pointed to by the Examiner, merely provides for (underlining added for emphasis) "... spacer 400 includes a first, load-bearing member 402 which has a nonuniform height... When included in a flat panel display, member 402 contacts the faceplate substantially only at the point of maximum height." (Column 8, lines 39 - 45) . As such, member 402 is a load-bearing support which per se only makes support contact at the peak (point of maximum height). While there are two lower areas adjacent to the peak on either side, such single peak does not describe, teach or suggest a plurality of exhaust grooves, merely one occurrence of a pair of lower areas below the peak. In fact, Anderson et al. desires "... minimizing the contact of spacer 400 with the face plate of the display ..." (Column 8, lines 48 - 49) . As such,

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Anderson et al. would thereby not intend to have a series of or other repeating peaks and accompanying adjacent lower areas resulting from the nonuniform height.

Accordingly, the Applicant submits that Claims 1 and 18 are not anticipated by Anderson et al. under 35 U.S.C. §102(b).

Claims 2 - 3, 6 - 17 are dependent on Claim 1. Claim 20 is dependent on Claim 18. As such, the claims are believed allowable based upon Claims 1 and 18 respectively.

Also of note is that Claims 9 and 20 have been further amended to more clearly claim the invention, calling for (underlining added for emphasis) ... wherein the image distortion preventing grooves are in one to one correspondence with the exhaust grooves with respect to a longitudinal axis of the spacer.

As claimed in Claims 8, 9 and 20, the present invention provides for the spacers having grooves on both sides of the spacer longitudinal axis, and further provides for the image distortion prevention grooves being in one to one correspondence with the exhaust grooves. The Applicant submits that such a spacer configuration is not described, taught or suggested by the prior art.

Accordingly, in view of the above amendment and remarks it is submitted that the claims are patentably distinct over the prior art, that all the rejections to the claims have been overcome, and that the Application is in condition for allowance. Entry of this Amendment and reconsideration and reexamination of the above Application is requested.

Attached hereto is a marked-up version of the changes made to the above-identified application by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,

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VERSION TO SHOW CHANGES MADE

In the Claims

Claims 1, 9, 18 and 20 have been amended as follows:

1.(twice amended) A flat panel display comprising:  
a faceplate;  
a backplate combined with the faceplate to form a vacuum tight cell;  
an image production unit provided within the cell to produce display images from the cell;  
a plurality of spacers mounted within the cell such that the spacers are placed at a non-display area and extend substantially across the cell, the spacers being held between the faceplate and the backplate, wherein each of the plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell;

a pair of alignment members connected to the spacers such that the spacers and alignment members form [a] an integral spacer body, to align the spacers at the non-display area in a constant manner; and

a pair of subsidiary alignment members, wherein the subsidiary alignment members are attached substantially perpendicular to the alignment members to form a substantially rectangular spacer holding state reinforcement frame enclosing the spacers.

[wherein each of said plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell].

9.(twice amended) The flat panel display of claim 7, wherein the exhaust grooves are positioned adjacent to the backplate and the image distortion grooves are positioned adjacent to the faceplate, and wherein the [exhaust grooves and the] image distortion preventing grooves are [symmetrical to each other] in one to one correspondence with the exhaust grooves with respect to a longitudinal axis of the spacer.

18. (amended ) A spacer apparatus [body] for a flat panel display, the spacer apparatus [body] comprising:

a plurality of spacers for mounting within a vacuum tight cell of a flat panel display such

that the spacers are placed at a non-display area and extend substantially across the cell; a pair of alignment members connected to the spacers such that the spacers and alignment members form an integral spacer body, to align the spacers at the non-display area in a constant manner, [; and] wherein each of the plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell; and

a pair of subsidiary alignment members, wherein the subsidiary alignment members are attached substantially perpendicular to the alignment members to form a substantially rectangular spacer holding state reinforcement frame enclosing the spacers.

20. (amended) The spacer apparatus [body] of claim 18, wherein the exhaust grooves of each spacer are positioned along a length of the spacer while being spaced apart from each other by a predetermined distance, and wherein each spacer is provided with a plurality of image distortion prevention grooves, the image distortion preventing grooves of each spacer being positioned along a length of the spacer while being spaced apart from each other by a predetermined distance, and wherein the [exhaust grooves and the] image distortion preventing grooves are [symmetrical to each other] in one to one correspondence with the exhaust grooves with respect to a longitudinal axis of the spacer.